

Amendment "B"

No claims are being added, cancelled, amended or withdrawn as of this Response. The status of the claims following this response is as follows:

Claim 1 (original). A fuel pellet package for use with a fuel activation device for a fuel cell, the fuel pellet package comprising:

a packaging;

a hermetically sealed envelope supported within the packaging;

a plurality of fuel pellets, each including hydrogen releasable by the fuel activation device, wherein the fuel pellets are arranged as a stack within the hermetically sealed envelope; and

a first spring configured to exert a first force coupled to the fuel pellets.

Claim 2 (original). The fuel pellet package of claim 1, and wherein the packaging and the hermetically sealed envelope are each configured to be selectively openable in response to a predefined action.

Claim 3 (original). The fuel pellet package of claim 2, and wherein the predefined action includes usably coupling the fuel pellet package with the fuel activation device.

Claim 4 (original). The fuel pellet package of claim 2, and wherein the predefined action includes usably coupling the fuel pellet package with a pellet dispensing device of the fuel activation device

Claim 5 (original). The fuel pellet package of claim 1, and further comprising a desiccant configured to absorb moisture away from the plurality of fuel pellets.

1 Claim 6 (original). The fuel pellet package of claim 1, and further comprising a layer
2 of passivating material disposed between each of adjacent ones of the plurality of
3 fuel pellets, the passivating material configured to prevent moisture from releasing
4 the hydrogen from the fuel pellets.

5

6 Claim 7 (original). The fuel pellet package of claim 1, and wherein the first spring is
7 further configured to advance the fuel pellets in a predefined direction in response to
8 a removal of a fuel pellet from the stack.

9

10 Claim 8 (original). The fuel pellet package of claim 1, and further comprising a
11 second spring configured to exert a second force coupled to the fuel pellets in a
12 direction substantially opposite to that of the first force, and wherein the first spring
13 and the second spring are each further configured to advance the fuel pellets in
14 respective predefined directions in response to a removal of a fuel pellet from the
15 stack.

16

17 Claim 9 (original). The fuel pellet package of claim 1, and wherein each of the fuel
18 pellets is configured to release the hydrogen as a gas in response to contact with an
19 activation liquid.

20

21 Claim 10 (original). The fuel pellet package of claim 9, and wherein each of the fuel
22 pellets is further configured such that the activation liquid is acidic water.

23

24 Claim 11 (original). The fuel pellet package of claim 1, and wherein each of the fuel
25 pellets is configured to release the hydrogen as a gas in response to providing
electrical energy to an electrically conductive outer coating of the fuel pellet.

1 Claim 12 (original). The fuel pellet package of claim 1, and wherein each of the fuel
2 pellets is configured to release the hydrogen as a gas in response to heating the fuel
3 pellet.

4

5 Claim 13 (original). The fuel pellet package of claim 1, and wherein each of the fuel
6 pellets includes at least one of NaBH4, CaH4, or a zeolite.

7

8 Claim 14 (withdrawn). A fuel activation device for use with a fuel cell, comprising:

9 a fuel activation chamber;

10 a fuel storage chamber configured to store a plurality of fuel pellets arranged
11 as a stack;

12 a fuel dispensing device configured to selectively transport a fuel pellet from
13 the stack of fuel pellets to the fuel activation chamber in response to a dispensing
14 input, and wherein the fuel activation device further includes a spring configured to
15 advance the fuel pellets toward the fuel dispensing device in response to a removal
16 of one or more fuel pellets from the stack; and

17 a fuel initiator supported in the fuel activation chamber and configured to
18 activate a release of a hydrogen gas from the transported fuel pellet, and wherein
19 the fuel activation chamber is further configured to provide the hydrogen gas to the
20 fuel cell through a gas vent.

21

22 Claim 15 (withdrawn). The fuel activation device of claim 14, and wherein the fuel
23 activation chamber is further configured to store a waste product resulting from the
24 release of the hydrogen gas from the fuel pellet by the fuel initiator.

25

Claim 16 (withdrawn). The fuel activation device of claim 14, and wherein each of
the fuel pellets includes at least one of NaBH4, CaH4, or a zeolite.

1 Claim 17 (withdrawn). The fuel activation device of claim 14, and wherein:

2 the fuel storage chamber is further configured to receivably store a fuel pellet
3 package including the plurality of fuel pellets arranged as the stack and the spring
4 configured to advance the fuel pellets toward the fuel dispensing device.

5

6 Claim 18 (withdrawn). The fuel activation device of claim 14, and further comprising
7 a desiccant configured to absorb moisture away from the plurality of fuel pellets in
8 the fuel storage chamber.

9

10 Claim 19 (withdrawn). The fuel activation device of claim 14, and further comprising
11 the plurality of fuel pellets arranged as the stack and a layer of passivating material
12 disposed between each of adjacent ones of the plurality of fuel pellets, the
13 passivating material configured to prevent moisture from releasing the hydrogen gas.

14

15 Claim 20 (withdrawn). The fuel activation device of claim 14, and further comprising
16 the plurality of fuel pellets.

17

18 Claim 21 (withdrawn). The fuel activation device of claim 14, and further comprising
19 a hydrophobic membrane supported in the fuel activation chamber, and wherein:

20 the fuel initiator includes acidic water;
21 each of the fuel pellets is configured to release the hydrogen gas in response
22 to contact with the acidic water; and
23 the hydrophobic membrane is configured to permit the hydrogen gas to pass
24 from the fuel initiator through the hydrophobic membrane and to the gas vent.

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1 Claim 22 (withdrawn). The fuel activation device of claim 21, and further comprising
2 a snorkel tube configured to permit passage of the transported fuel pellet from the
3 fuel storage chamber to the fuel initiator, and wherein the snorkel tube is further
4 configured to prevent the acidic water from entering the fuel storage chamber
5 regardless of the orientation of the fuel activation device with respect to gravity.

6

7 Claim 23 (withdrawn). The fuel activation device of claim 14, and wherein the
8 dispensing input is defined as a signal provided by a controller.

9

10 Claim 24 (withdrawn). The fuel activation device of claim 23, and wherein:

11 the pellet dispensing device includes a linear actuator coupled to a pusher
12 element;

13 the linear actuator is coupled in controlled relationship with the controller; and

14 the linear actuator is optionally one of a solenoid or a linear motor.

15

16 Claim 25 (withdrawn). The fuel activation device of claim 23, and wherein the pellet
17 dispensing device includes one of a ratchet mechanism, an auger mechanism, or a
18 feed magazine mechanism coupled in controlled relationship with the controller.

19

20 Claim 26 (withdrawn). The fuel activation device of claim 23, and wherein:

21 the fuel initiator includes a heater configured to selectively heat the
22 transported fuel pellet in response to a corresponding signal provided by the
23 controller; and

24 each of the fuel pellets is configured to release the hydrogen gas in response
25 to being heated by the heater.

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1 Claim 27 (withdrawn). The fuel activation device of claim 26, and further comprising
2 a support passage extending generally away from the fuel storage chamber into the
3 fuel activation chamber, and wherein:

4 the support passage is configured to supportingly receive the transported fuel
5 pellet from fuel storage chamber by way of the pellet dispensing device regardless of
6 the orientation of the fuel activation device with respect to gravity;

7 the heater is further configured to heat the fuel pellet supportingly received
8 within the support passage; and

9 the support passage is further configured to fluidly couple the hydrogen gas to
10 the fuel activation chamber.

11
12 Claim 28 (withdrawn). The fuel activation device of claim 23, and wherein:

13 the fuel initiator includes at least two electrodes each configured to couple
14 electrical energy provided by the controller to the transported fuel pellet; and

15 each of the fuel pellets is configured to release the hydrogen gas in response
16 to the electrical energy coupled by the at least two electrodes.

17
18 Claim 29 (withdrawn). The fuel activation device of claim 28, and wherein:

19 each of the at least two electrodes is coupled to a respective spring such that
20 the at least two electrodes define a clamp assembly configured to supportingly
21 receive the transported fuel pellet from fuel storage chamber by way of the pellet
22 dispensing device regardless of the orientation of the fuel activation device with
23 respect to gravity; and

24 the clamp assembly is further configured to fluidly couple the hydrogen gas to
25 the fuel activation chamber.

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1 Claim 30 (withdrawn). The fuel activation device of claim 28, and wherein the fuel
2 initiator further includes a plurality of electrodes each electrically coupled to the
3 controller; and

4 the plurality of electrodes is arranged to define a grid configured to support
5 the fuel pellet during the provision of the electrical energy.

6

7 Claim 31 (withdrawn). The fuel activation device of claim 30, and wherein the
8 plurality of electrodes is further configured such that portions of the grid are
9 selectively electrically energizable by the controller.

10

11 Claim 32 (withdrawn). A method of providing hydrogen to a fuel cell, comprising:

12 providing a plurality of fuel pellets, the fuel pellets including hydrogen;
13 arranging the plurality of fuel pellets as a spring loaded stack;
14 transporting a fuel pellet from the stack;
15 activating a release of the hydrogen as a gas from the transported fuel pellet;

16 and

17 providing the hydrogen gas to the fuel cell.

18

19 Claim 33 (withdrawn). The method of claim 32, and further comprising protecting the
20 plurality of fuel pellets arranged as a stack against contact with moisture.

21

22 Claim 34 (withdrawn). The method of claim 32, and wherein the activating includes
23 placing the transported fuel pellet into contact with an activation liquid.

24

25 Claim 35 (withdrawn). The method of claim 32, and wherein the activating includes
heating the transported fuel pellet.

1 Claim 36 (withdrawn). The method of claim 32, and wherein the activating includes
2 providing electrical energy to the transported fuel pellet.

4 Claim 37 (withdrawn). A method of packaging fuel pellets, comprising:

5 providing a packaging defining a chamber;
6 supporting a impermeable material within the chamber;
7 supporting a plurality of fuel pellets as a stack substantially within the
8 impermeable material, the fuel pellets including hydrogen;
9 sealing the impermeable material thus defining a hermetically sealed
10 envelope about the plurality of fuel pellets; and
11 sealing the chamber about the hermetically sealed envelope.

13 Claim 38 (withdrawn). The method of claim 37, and further comprising:

14 supporting a spring within the chamber; and
15 exerting a force coupled to the stack of fuel pellets using the spring.

17 Claim 39 (withdrawn). The method of claim 37, and further comprising supporting a
18 desiccant within the hermetically sealed envelope.

20 Claim 40 (withdrawn). The method of claim 37, and further comprising supporting a
21 layer of passivating material between each of adjacent ones of the fuel pellets within
22 the stack.

24 (End of Amendment "B".)

25 (Continued on next page.)